UNITED STATES PATENT AND TRADEMARK OFFICE

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
   Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _08 December 2005_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-20_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-20_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on _08 December 2005_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____ .
      3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _12/08/2005, 1/11/2008_.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

Claim Construction

Claims 16-20 are being construed under 35 U.S.C 112, sixth paragraph for

properly being invoked.

Specification

The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claims 16-20 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. There is no further corresponding discussion

determining the specifics of the means-plus-function within the specification.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claims 1-20 are rejected under 35 U.S.C. 101 as not falling within one of the four

statutory categories of invention.

Regarding claims 1-5, the claim is directed towards a conflict management program. Since computer programs are not of any process, machine, manufacture or composition of matter, it fails to fall within a statutory category and thus non-statutory.

Regarding claims 6-10, the claim is directed to a "storage medium" or machine, but fails to disclose physical "things". Since the phrase storage medium is recited only in the preamble, and the body of the claim only recites software elements, the claim is interpreted as directed to a combination of software elements. Since the invention is relying on the instructions, and the instructions outline a method, than the method must either (1) transform a particular article to a different state or thing or (2) be tied to another statutory category (See *In re Bilski,* 545 F.3d 943, 88 USPQ2d 1385 (Fed Cir. 2008).

Regarding claims 11-15, are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to a particular machine or apparatus or (2) transform a particular article to a different state or thing (See *In re Bilski,* 545 F.3d 943, 88 USPQ2d 1385 (Fed Cir. 2008). The instant claims neither transform a particular article nor positively tie to a particular machine or apparatus that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

Regarding claims 16-20, are rejected under U.S.C. 101 because the claim invention are directed towards an arrangement comprising means for receiving a task execution request, means for registering an active task in a active list, means for

detecting a task conflict, means for determining the state of a task and means for

placing the task in the active task list. These "means" are all software modules/functions

and an arrangement of such software is directed to non-statutory subject matter since

they are not of any process, machine, manufacture or composition of matter, thus they

fail to fall within a statutory category and thus non-statutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 6-7, 11-12, and 16-17 are rejected under 35 U.S.C. 102 (b) as being

anticipated by Shitahaku (Shitahaku) US 20020037753 A1.

With respects to claim 1, Shitahaku teaches a computer-readable conflict

management program that is to be executed by a computer, the conflict management

program comprising the steps of: receiving a task execution request (Para 38, lines 1-

2); registering an active task in an active task list (Para 38, lines 2-3); detecting for a

task conflict by referencing the active task list when the task execution request is

received in the execution request reception step (Para 43, lines 1-4); determining the

state to which a task designated by the task execution request should switch and the

state to which a task registered in the active task list should switch in accordance with

predetermined conditions when a task conflict is detected in the conflict detection step

(Para 43, lines 5-9); and respectively placing the task designated by the task execution request and the task registered in the active task list in the states determined in the transition state determination step (Para 44, lines 1-5).

With respects to claim 2, Shitahaku teaches the computer-readable conflict management program according to claim 1, wherein the transition state determination step comprises: referencing, when a task conflict is detected in the conflict detection step, a conflict condition table that stores states to which conflicting tasks should switch (see figures 6, 7 & 12); and determining respectively the state to which the task designated by the task execution request should switch and the state to which the task registered in the active task list should switch (see figures 5 & 9).

With respects to claim 6, Shitahaku teaches, a storage medium for storing a computer-readable conflict management program that is to be executed by a computer and causing the computer to perform the steps of: receiving a task execution request (Para 38, lines 1-2); registering an active task in an active task list (Para 38, lines 2-3); detecting for a task conflict by referencing the active task list when the task execution request is received in the execution request reception step (Para 43, lines 1-4); determining the state to which a task designated by the task execution request should switch and the state to which a task registered in the active task list should switch in accordance with predetermined conditions when a task conflict is detected in the conflict detection step (Para 43, lines 5-9); and respectively placing the task designated by the task execution request and the task registered in the active task list in the states determined in the transition state determination step (Para 44, lines 1-5).

With respects to claim 7, Shitahaku teaches the storage medium according to claim 6, wherein the transition state determination step comprises: referencing, when a task conflict is detected in the conflict detection step, a conflict condition table that stores states to which conflicting tasks should switch (see figures 6, 7 & 12); and determining respectively the state to which the task designated by the task execution request should switch and the state to which the task registered in the active task list should switch (see figures 5 & 9).

With respects to claim 11, Shitahaku teaches a conflict management method comprising the steps of: receiving a task execution request (Para 38, lines 1-2); registering an active task in an active task list (Para 38, lines 2-3); detecting for a task conflict by referencing the active task list when the task execution request is received in the execution request reception step (Para 43, lines 1-4); determining the state to which a task designated by the task execution request should switch and the state to which a task registered in the active task list should switch in accordance with predetermined conditions when a task conflict is detected in the conflict detection step (Para 43, lines 5-9); and respectively placing the task designated by the task execution request and the task registered in the active task list in the states determined in the transition state determination step (Para 44, lines 1-5).

With respects to claim 12, Shitahaku teaches the conflict management method according to claim 11, wherein the transition state determination step comprises: referencing, when a task conflict is detected in the conflict detection step, a conflict condition table that stores states to which conflicting tasks should switch (see figures 6,

7 & 12); and determining respectively the state to which the task designated by the task

execution request should switch and the state to which the task registered in the active

task list should switch (see figures 5 & 9).

With respects to claim 16, Shitahaku teaches. an electronic apparatus

comprising: execution request receiver means for receiving a task execution request

(Para 38, lines 1-2); active task registration means for registering an active task in an

active task list (Para 38, lines 2-3); conflict detection means for referencing the active

task list to detect for a task conflict when the task execution request is received by the

execution request receiver means(Para 43, lines 5-9); transition state determination

means for determining the state to which a task designated by the task execution

request should switch and the state to which a task registered in the active task list

should switch in accordance with predetermined conditions when a task conflict is

detected by the conflict detection means (Para 43, lines 5-9); and state transition

means for respectively placing the task designated by the task execution request and

the task registered in the active task list in the states determined by the transition state

determination means (Para 44, lines 1-5).

With respects to claim 17, Shitahaku teaches. the electronic apparatus according

to claim 16, further comprising: a conflict condition table that stores states to which

conflicting tasks should switch, wherein when a task conflict is detected by the conflict

detection means, the transition state determination means references the conflict

condition table (see figures 6, 7 & 12), and determines the state to which a task

designated by the task execution request should switch and the state to which a task

registered in the active task list should switch (see figures 5 & 9).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-5, 8-10, 13-15, 18-20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Shitahaku US 2002/0037753 in view of Parkin (Parkin) US Patent

4073005.

With respects to claim 3, Shitahaku teaches the computer-readable conflict

management program according to claim 2; However it is silent to the fact of registering

a task in an execution list that is within the active list and registering a task to wait to be

executed within the execution list.

However Parkin teaches wherein the active task registration step comprises:

registering the task to be executed in an execution list within the active task list (see

figure 5, part 502); and registering the task that should wait for execution in an

execution wait list within the active task list (see figure 5, part 502; It is understood that

once the task status is set to ready it is waiting to be executed).

It would have been obvious to a person of ordinary skill in the art at the time of

the invention was made to incorporate the teachings of Parkin into the methods of

Shitahaku to register a task to be executed within the active list as well as register the

next task to be executed after the completion of the current task. The modification would

have been obvious because on of ordinary skill of the art would have added this

capability to not only increase the efficiency and convenience of the system but to also

ensure the system is operating optimal capacity.

With respects to claim 4, Parkin teaches the computer-readable conflict

management program according to claim 3, wherein the active task registration step

comprises: selecting the task to be executed and the task that should wait for execution

in accordance with the priorities of the states determined in the transition state

determination step (Col 15, lines 29-30; Col 2, lines 54-56); registering the task to be

executed in the execution list (see figure 5, part 502); and registering the task that

should wait for execution in the execution wait list (see figure 5, part 502; It is

understood that once the task status is set to ready it is waiting to be executed).

With respects to claim 5, Parkin teaches the computer-readable conflict management

program according to claim 2, wherein the transition state determination step

comprises: canceling the task execution request when it is determined that the task

designated by the task execution request cannot be executed (Col 15, lines 31-34).

With respects to claim 8, Parkin teaches the storage medium according to claim

7, wherein the active task registration step comprises: registering the task to be

executed in an execution list within the active task list (see figure 5, part 502); and

registering the task that should wait for execution in an execution wait list within the

active task list (see figure 5, part 502; It is understood that once the task status is set to ready it is waiting to be executed).

With respects to claim 9, Parkin teaches the storage medium according to claim 8, wherein the active task registration step comprises: teaches selecting the task to be executed and the task that should wait for execution in accordance with the priorities of the states determined in the transition state determination step (Col 15, lines 29-30; Col 2, lines 54-56); registering the task to be executed in the execution list (see figure 5, part 502); and registering the task that should wait for execution in the execution wait list (see figure 5, part 502; It is understood that once the task status is set to ready it is waiting to be executed).

With respects to claim 10, Parkin teaches the storage medium according to claim 7, Parkin teaches wherein the active task registration step comprises canceling the task execution request when it is determined that the task designated by the task execution request cannot be executed (Col 15, lines 31-34).

With respects to claim 13, Parkin teaches the conflict management method according to claim 12, wherein the active task registration step comprises: registering the task to be executed in an execution list within the active task list (see figure 5, part 502); and registering the task that should wait for execution in an execution wait list within the active task list (see figure 5, part 502; It is understood that once the task status is set to ready it is waiting to be executed).

With respects to claim 14, Parkin teaches the conflict management method according to claim 13, wherein the active task registration step comprises: selecting the task to be executed and the task that should wait for execution in accordance with the priorities of the states determined in the transition state determination step (Col 15, lines 29-30; Col 2, lines 54-56); registering the task to be executed in the execution list (see figure 5, part 502); and registering the task that should wait for execution in the execution wait list (see figure 5, part 502; It is understood that once the task status is set to ready it is waiting to be executed).

With respects to claim 15, Parkin teaches the conflict management method according to claim 12, wherein the transition state determination step comprises: canceling the task execution request when it is determined that the task designated by the task execution request cannot be executed (Col 15, lines 31-34).

With respects to claim 18, Parkin teaches the electronic apparatus according to claim 17, wherein the active task registration means registers the task to be executed in an execution list within the active task list (see figure 5, part 502) and registers the task that should wait for execution in an execution wait list within the active task list (see figure 5, part 502; It is understood that once the task status is set to ready it is waiting to be executed).

With respects to claim 19, Parkin teaches the electronic apparatus according to claim 18, wherein the active task registration means selects the task to be executed and the task that should wait for execution in accordance with the priorities of the states

determined by the transition state determination means, registers the task to be

executed in the execution list (see figure 5, part 502), and registers the task that should

wait for execution in the execution wait list (see figure 5, part 502; It is understood that

once the task status is set to ready it is waiting to be executed).

With respects to claim 20, Shitahaku teaches the electronic apparatus according

to claim 17, wherein the transition state determination means cancels the task execution

request when it is determined that the task designated by the task execution request

cannot be executed (Col 15, lines 31-34).

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Kamada et al. (US Patent 6108683 and 6668269), Culbert (US

Patent 5838968) and Kalhour and Mortez (US Publication 2002/0007408) teach on

conflict resolution and task allocation based on priorities.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to DOUGLAS BRYANT whose telephone number is

(571)270-7707. The examiner can normally be reached on M-F 8:00-5:00pm Est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David L. Robertson can be reached on 571-272-4186. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. B./   /David L. Robertson/
Examiner, Art Unit 4123   Supervisory Patent Examiner
                                                     Art Unit 4123